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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/018,768	12/17/2001		Quentin J Harmer	DHN/321/PC/US	2005
2543	7590	02/24/2005		EXAMINER	
ALIX YAL		ΓAS LLP	MENDOZA, MICHAEL G		
750 MAIN STREET SUITE 1400			•	ART UNIT PAPER NUMBER	
HARTFORD, CT 06103				3731	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

1							
	Application No.	Applicant(s)					
	10/018,768	HARMER ET AL.					
Office Action Summary	Examiner	Art Unit					
	Michael G. Mendoza	3731					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
 Responsive to communication(s) filed on <u>29 December 2004</u>. This action is FINAL. 2b)⊠ This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213. 							
Disposition of Claims							
4) Claim(s) 1,3,5,6,13,16 and 18 is/are pending in 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) 1,3,5,6,13,16 and 18 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or	vn from consideration.						
Application Papers							
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicated any not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ■ All b) ■ Some * c) ■ None of: 1. ■ Certified copies of the priority documents have been received. 2. ■ Certified copies of the priority documents have been received in Application No. ■ 3. ■ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summan Paper No(s)/Mail D 5) Notice of Informal 6) Other:						

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 3, 5, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lankinen 5476093.
- 3. Lankinen teaches an inhaler comprising: a chamber having a mouthpiece; a cyclone with a tangential inlet and an axial outlet; a drug dosing device arranged to provide a dose of powdered medicament entrained in an airflow the cyclone (col. 7, lines 56-67; col. 8, lines 1-2); wherein the diameter of the cylindrical cavity is between 4 and 10 mm (col. 6, lines 56-58); the drug dosing device is arranged to provide a dose of powdered medicament entrained in a gasflow to the cyclone (col. 7, lines 56-67; col. 8, lines 1-2); and wherein the chamber is comparable in volume to the cyclone (col. 6, lines 56-58). It should be noted that Lankinen fails to teach a piston pump comprising a plunger and a pump cylinder. However, it is well known in the art of gas flow induced by expansion that the use of a piston pump is a well known alternative (evidenced by U.S. Patents 6453795, 6029662, 5755221, and 5645050) to using the pumpet or pressurized container of Lankinen for producing an air flow. Therefore, it would have been obvious to one having ordinary skill in the art to use a piston pump as an alternative to using a pumpet or pressurized container.

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- 4. Claims 6, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lankinen in view of Patton et al. 5458135.
- 5. Lankinen teaches the inhaler as claimed above. It should be noted that Lankinen fails to teach wherein the chamber has a volume of around 300 ml.
- 6. Patton et al. teaches an inhaler with a common chamber volume of around 300 ml (col. 10, lines 50-51). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the chamber of Lankinen around 300 ml to allow the patient to draw the entire dose of medicament into the lungs and continue in the same breath to take in air from the ambient which helps drive the medicament further down into the alveolar region of the lungs (col. 3, lines 45-49; col. 10, lines 51-57).

FIG. 30

FIG. 30

FIG. 40

A tangential 3

FIG. 40

FIG. 50

FIG. 50

FIG. 50

Chamber

FIG. 3b

FIG. 3b

FIG. 4b

FIG. 4b

FIG. 4b

FIG. 5c

Ayial

FIG. 5c

FIG. 5c

FIG. 5c

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Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael G. Mendoza whose telephone number is (571) 272-4698. The examiner can normally be reached on Mon.-Fri. 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dawson can be reached on (571) 272-4694. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

pm

MM

GLENN K. DAWSON PRIMARY EXAMINER